

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Original)** A lighting apparatus using microwave energy, comprising:
a magnetron disposed inside a casing, for generating microwave energy;
a waveguide for guiding microwave energy;
a resonator providing a resonant region in which the microwave energy is resonated;
a bulb disposed inside the resonator, and filled with a material which emits light, when excited by the microwave energy; and
a rear mirror integrally fixed to a rear of the bulb, for forwardly reflecting light rearwardly emitted from the bulb.
2. **(Original)** The apparatus of claim 1, wherein the rear mirror is formed in a hemispherical shape having a curved shape.
3. **(Original)** The apparatus of claim 2, wherein the bulb is positioned at a focal point of the curved surface of the rear mirror.
4. **(Original)** The apparatus of claim 1, wherein the rear mirror is made of a quartz material.
5. **(Original)** The apparatus of claim 1, further comprising a fixed mirror fixed to the casing at a rear side of the bulb and having a hole in which a bulb stem rearwardly extended from the bulb is rotatably inserted, for forwardly reflecting light emitted to the rear of the bulb.
6. **(Original)** The apparatus of claim 5, wherein a diameter of the hole of the fixed mirror is formed to be smaller than a width of the rear mirror.

7. **(Original)** The apparatus of claim 5, wherein the fixed mirror is formed in a hemispherical shape having a curved shape.

8. **(Original)** The apparatus of claim 7, wherein the bulb is positioned at a focal point of the curved surface of the fixed mirror.

9. **(Original)** The apparatus of claim 5, wherein the rear mirror is formed in a hemispherical shape having a curved shape.

10. **(Original)** The apparatus of claim 9, wherein the bulb is positioned at a focal point of the curved surface of the rear mirror.

11. **(Original)** The apparatus of claim 5, wherein the rear mirror is made of a quartz material.

12. **(Original)** The apparatus of claim 5, wherein the fixed mirror is made of a ceramic material.

13. **(Original)** The apparatus of claim 12, wherein the fixed mirror is made of an Al_2O_3 , Si_3N_4 or AlN material.